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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,369	02/28/2000	Takayuki Shinohara	49657-625	9468

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/514,369

Applicant(s)

SHINOHARA ET AL.

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-19 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7 and 9-19 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2-4,6,7 and 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton et al. (Sainton), U.S. Pub. 2005/0159179, in view of Norman, U. Patent No. 6,034,891.

Regarding Claims 1 and 12, Sainton discloses a memory system for a portable telephone including a signal transmission/reception portion for transmitting and receiving a signal and a control portion for controlling at least a signal transmission and reception operation of said transmission/reception portion, comprising:

a memory providing a working area for said control portion {p. 6 [0064]};
and a memory for storing a program for said control portion and at least transmission and reception in a non-volatile manner under a control of said

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control portion, and provides temporal storage of transmitted information {p. 6 [0064-0070]}.

Sainton fails to explicitly disclose a flash memory including a memory array for storing a program for said control portion and at least transmission and reception in a non-volatile manner under a control of said control portion, said memory array being divided into a plurality of storage units, and a register, provided commonly to the respective storage units, having information in a storage unit of said plurality of storage units transmitted thereinto and allowing serial readout of the transmitted information.

In a similar field of endeavor, Norman discloses multi-state flash memory defect management wherein a random access memory and a flash memory including a memory array for storing a program for said control portion and at least transmission and reception in a non-volatile manner under a control of said control portion, said memory array being divided into a plurality of storage units, and a register, provided commonly to the respective storage units, having information in a storage unit of said plurality of storage units transmitted thereinto and allowing serial readout of the transmitted information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

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Regarding Claim 2, Sainton teaches the memory system for the portable telephone according to claim 1, wherein said random access memory and said flash memory are coupled to an internal bus interconnecting said control portion and said signal transmission/reception portion (It is inherent, that the RAM and the flash memory are coupled to an internal bus interconnecting all major parts of the mobile phone, including the control portion and the transmission/reception portion) {p. 6 [0067]}.

Regarding Claim 3, Norman teaches the memory system for the portable telephone according to claim 2 comprising a bus converting circuit connected between said file storage flash memory and said internal bus and functioning as an interface circuit for said file storage flash memory information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding Claim 4, Norman teaches the memory system for the portable telephone according to claim 3, wherein said file storage flash memory and said bus converting circuit are integrally formed into a memory card attachable and detachable to and from said portable telephone information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash

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memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding Claim 7, Norman teaches the memory system for the portable telephone according to claim 1, wherein said flash memory comprises an AND type flash memory information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding Claims 9 and 13, Norman teaches the memory system for a portable telephone according to claims 1 and 12, respectively, wherein a program stored in the storage unit of said plurality of storage units is serially read out to the RAM to be executed information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding Claims 10 and 14, Norman discloses the limitations of claims 1 and 12, respectively, wherein said control portion performs a process using the RAM as an instruction memory to which the program is serially transferred from

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the flash memory information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding Claims 11 and 15, Norman discloses the limitations of claims 1 and 15, respectively wherein said control portion stores transmission and reception data into said RAM as a buffer memory, and transfers the stored transmission and reception data from the RAM to the flash memory information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

Regarding claims 17 and 19, Norman further discloses the memory system for a portable telephone according to claims 12 and 1, respectively, wherein the storage units are each formed of a sector information (col. 2, line 12 to col. 4, line 38 and col. 5, line 57 to col. 6, line 65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Sainton to include a random access memory and a flash memory for the purpose transferring serially, data bits from one memory cell to another.

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4. Claims 5,6, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination Sainton and Norman, in view of Bowen et al. ("Bowen"), U.S. Patent No. 5,367,571.

Regarding Claim 5, Sainton and Norman as modified by Bando teaches the memory system for the portable telephone according to claim 3, wherein said file storage flash memory is constituted of a memory card being attachable and detachable to and from said bus converting circuit.

The combination of Sainton and Norman fails to explicitly show wherein said file storage flash memory is constituted of a memory card being attachable and detachable to and from said bus converting circuit.

In a similar field of endeavor, Bowen discloses wherein said file storage flash memory is constituted of a memory card being attachable and detachable to and from said bus converting circuit (see Fig. 7, #138 and col.12,line 60 to col.13,line 17).

At the time of the invention it would have been obvious to one of ordinary skill in the art to have modified the combination to include a detachable memory card for the purpose of providing additional memory to increase the internal memory of a portable unit.

Regarding Claim 6, the combination of Sainton and Norman teaches the memory system for the portable telephone according to claim 1, but is silent on said control portion, said random access memory and said file storage flash memory being integrally formed as a control unit.

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However, Bowen further discloses said control portion, said random access memory and said file storage flash memory being integrally formed as a control unit (see Fig. 7, #138 and col.12,line 60 to col.13,line 17).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to have said control portion, said random access memory and said file storage flash memory being integrally formed for the purpose of having an integrated control unit.

Regarding claims 16 and 18, Sainton and Norman disclose the limitations of claims 12 and 1, respectively, but fails to disclose wherein one unit of the storage units comprises a storage capacity ranging from 512 bytes to 2K bytes.

Bowen further discloses internal or external memory (i.e., for expansion) able to reach the size of memory in blocks or pages of 64K bytes (col. 120, lines 41-50).

Hence at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination to include an extensive amount of storage capacity for the purpose of expanding size of stored data by using an expansion card, which is detachable.

Allowable Subject Matter

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 571-272-7906. The examiner can normally be reached on M-F, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

08/09/2005


JOY K. CONTEE
REGISTERED EXAMINER


TEMICA BEAMER
PRIMARY EXAMINER